Selected Essays on the Transition to a New Nuclear Order

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Nuclear Learning in South Asia: The South Asian Experience

Rabia Akhtar

The South Asian experience of Indian and Pakistani nuclearization and the lessons learnt thereafter is different from the Cold War experience of the United States and the Soviet Union. While there are some structural similarities that remain the same for all nuclear weapons states, there are major differences in terms of how Indian and Pakistani threat perceptions have shaped their strategic culture and outlook given their shared past, ideologies, relationships with other countries in the international system, and their geographical placement in the regional system. In my co-authored monograph with Debak Das on 'Nuclear Learning in South Asia', we analyzed the lessons learnt by India and Pakistan at the following three levels: the individual, the organizational or bureaucratic, and the systemic levels (see figure below).[1]

At the Individual level, lessons by India and Pakistan are learned differently given the unique nature of the nuclear-decision making/policy elites in each country. In Pakistan, the nuclear decision-making elite consists of both politico-military elements, while in India, it is politico-scientific, with the military playing a minimal role in the decision-making process. Even after eighteen years of nuclearization, the nuclear establishment (politico-military/politico-scientific) in each country remains unchanged. At the domestic or state level of analysis, nuclear behavior is not the result of the state behaving as a unitary actor; rather the type of regime/government, organizations, and bureaucracies in each country have influenced, shaped, and defined their learning trajectories. Take, for example, the evolution of the 'deterrence posture' adopted by India and Pakistan over the past eighteen years. Both countries started by adopting 'credible minimum deterrence' as their defining doctrine, but over a period of years both countries have made attempts to modify their deterrence postures, even though each still maintains that its posture is 'minimal'. The level of Indian nuclear modernization in the past couple of years and its plans for future modernization reveal that deterrence will be anything but minimal, and it is quite possible that in coming years we will see a shift in the Indian strategic lexicon whereby the Indian policymakers and scholars will start using 'credible deterrence' sans the 'minimal'. For Pakistan however, the shift has already taken place, whereby 'credible minimum deterrence' has

[1] Rabia Akhtar and Debak Das, "Nuclear Learning in South Asia: The Levels of Analysis," *RCSS Policy Studies 57* (New Delhi: Manohar) 2015, 38 (pdf).

Third Image: The System *Global Nuclear Order: Threats and Opportunities*	
India	*Pakistan*
External threats from Pakistan and China Indo-US strategic partnership Reliance on US for Indo-Pak crisis management Realist aspirations and power projection Increasing nuclear arsenal and delivery systems	External threats from India Nuclear energy cooperation with China Reliance on US for Indo-Pak crisis management Realist aspirations and security maximisation Increasing nuclear arsenal and delivery systems
Second Image: The State *Strategic Outlook*	
Moved from threshold nuclear state (pre-1998) to NWS (post-1998) Moved from existential deterrence to credible minimum deterrence Shift from high to low level of strategic ambiguity Declared nuclear doctrine, NFU policy, massive retaliation	Moved from threshold nuclear state (pre-1998) to NWS (post-1998) Moved from existential deterrence to credible minimum deterrence Maintains strategic ambiguity about nuclear policy Undeclared nuclear doctrine, No NFU policy, MAD
First Image: The Individual *Nuclear Policy and Decision-Making Elite*	
No shift pre- and post-1998	No shift pre- and post-1998
Politico-scientific	Politico-military

been replaced with 'full spectrum deterrence', even though the establishment believes full spectrum deterrence to still be credible deterrence at minimal levels. What 'minimal' entails, however, is unknown for both countries and is open to interpretation. After eighteen years of nuclearization, 'evolution of deterrence' is a set pattern, one that clearly defines the nuclear learning trajectories of both India and Pakistan as they continue to grow as nuclear weapons states.[2] I would maintain that the path to nuclear modernization has itself been a negative outcome, for it entails a forever increasing arms race in the region, but the lessons generated for

[2] To understand Pakistan's nuclearization and deterrence dynamics, please see Gen. Khalid Kidwai's (former DG Strategic Plans Division NCA, Pakistan) interview with Peter Lavoy at the Carnegie Nuclear Policy Conference, March 23, 2015, available at http://carnegieendowment.org/2015/03/23/interview-with-khalid-kidwai/i2sx. For an understanding of Indian nuclear deterrence, see Shyam Saran's talk (former Special Envoy for Nuclear Affairs) on 'Is India's Nuclear Deterrent Credible', at India Habitat Center, New Delhi, April 24, 2013, available at http://www.armscontrolwonk.com/files/2013/05/Final-Is-Indias-Nuclear-Deterrent-Credible-rev1-2-1-3.pdf.

deterrence and steps taken by both countries for the augmentation and sustainability of deterrence credibility are positive.

Systemic Influences on Indian and Pakistani Nuclear Choices

The first, and perhaps the most important, lesson that the two countries learnt came from their observations at the systemic level and how the two nuclear superpowers, the U.S. and the Soviet Union, conducted their affairs. Their outlook stemmed from the international system that took shape post-WWII up until the early 1970s, which gave birth to a nuclear order that recognized only five nuclear weapons states (NWS), namely, the United States, Russia, UK, France, and China, as the only legitimate nuclear powers. The entry to the nuclear club was closed to all other countries after the Non-proliferation Treaty (NPT) came into force in 1970. In South Asia, India and Pakistan challenged this nuclear order and refused to become part of the non-nuclear club or the treaty that refused entry to any future nuclear aspirants.

In their run up to nuclearization, India and Pakistan observed that the inconsistencies of the established nuclear order were a sort of 'organized hypocrisy' whereby the privileged five enjoyed a status no others did in the international system. Both countries believed that nuclear weapons were a currency of power, prestige, and security—a negative lesson, perhaps, but a lesson nonetheless. The duo learned that deterrence was not just a jazzy concept, but that it actually worked and the balance of terror ensured 'nuclear peace'. To nuclear optimists this might appear as a positive lesson, but if you were to ask someone today to make a prediction about the next 70 years of nuclear peace, then the answer might not be a resounding yes, which in itself is the single most disturbing reality of a world with nine NWS.

The organized hypocrisy of the nuclear non-proliferation regime—whereby, having monopolized the global nuclear export control arrangements (Nuclear Suppliers Group et al.), several countries controlled who benefitted from nuclear energy, trade, and commerce—was perhaps the most influential negative lesson, emboldening the desire of India and Pakistan to achieve their own nuclear weapons capability. After having used nuclear weapons in the one and only incident in history thus far, the United States led the way in promoting the idea of a 'nuclear taboo' or the non-use of nuclear weapons, establishing it as a tradition that conveniently reinforced the nuclear

order by invoking the ethical, moral, and humanitarian arguments against the use of nuclear weapons. These arguments did manage to discourage prospective proliferants, but not without exceptions. On the promises made, despite the 'good faith' approach enshrined in the NPT to work towards nuclear disarmament, the five NWS continued their respective nuclear and missile developments over the years until they reached nuclear sufficiency. The negative lesson therein echoed lack of commitment and non-seriousness about nuclear disarmament by the P-5. Even today, the U.S., Russian, and Chinese nuclear modernization attempts are indicative of a new reality in which the nuclear disarmament pillar of the NPT regime might become obsolete in coming years because the *de jure* NWS lack commitment to follow through on nuclear disarmament. Last but not least, Israel becoming the closet nuclear proliferant in the 1960s and managing to maintain false nuclear ambiguity even today only helps reinforce this organized hypocrisy.

These examples allow us to achieve a systemic understanding of the discriminatory nature of the nuclear order, which created the divide between the haves and have-nots and was not ideal for discouraging nuclear proliferation. And since the system has held on to this discrimination, conditions to discourage further nuclear proliferation are not conducive enough to deter future proliferants. This first set of learning took place by just observing how NWS behaved in the international system and how the system was geared to benefit the few. It shaped the psyche of the nuclear outliers that India and Pakistan became post 1970 and shaped their decision to acquire nuclear weapons.

Pakistan's Nuclear Learning

Specific to Pakistan, the learning took place at several levels and was related to the Indian nuclear developments post-1970 and how the international community responded to those developments. Pakistan's nuclear policy is driven by the security dilemma it faces vis-à-vis India. In the decade of the 1970s alone, a series of events cemented Pakistan's thinking about the discriminatory nature of the non-proliferation regime. Pakistan proposed the creation of a nuclear-weapon-free zone (NWFZ) in South Asia in September 1972, two years before the Indian nuclear test in 1974; however, the proposal didn't gain traction due to lack of support by the P-5, with the exception of China. After the Indian nuclear test in 1974, the UN General

Assembly approved Pakistan's proposal to create a NWFZ in South Asia, but India and Bhutan voted against the proposal.[3]

Like India, which sought positive security assurances against China when the NPT was being negotiated in the late 1960s, Pakistan also attempted to get positive security assurances against India in the late 1970s, but to no avail. After the Indian nuclear test in May 1974, Pakistan's narrative suggested that it was being persecuted for a crime that India had committed. India had conducted its first nuclear explosive test on May 18, 1974 by separating plutonium from the spent fuel from its Canadian-supplied nuclear reactor CIRUS (Canada-India-Reactor-United States), for which the United States has supplied the heavy water.[4] The Indian nuclear test (dubbed a peaceful nuclear explosion or PNE) was criticized worldwide for violating the integrity of bilateral nuclear agreements with Canada and the United States. After the Indian nuclear test, Canada unilaterally terminated its nuclear cooperation with Pakistan on December 22, 1976. Pakistan objected that Canadian decision was unjust, since Pakistan as party to the agreement had not violated any terms of their contract and that it was being punished for 'India's crime'. Pakistani press reported that "Canada, betrayed by India and publically acknowledging its inability to influence her…unaccountably sought to bill all that to Pakistan with interest."[5]

Pressure and denial of access to nuclear technology for peaceful purposes/civilian nuclear energy, e.g., the cancelled Pak-French plutonium reprocessing agreement in 1978, further added to the disappointment that was brewing, especially with respect to Pakistan-U.S. relations and the overall discriminatory nature of the non-proliferation regime. Additional pressure on Pakistan came when nuclear non-proliferation sanctions were invoked against Pakistan to restrain its nuclear ambitions. The Symington sanction, a U.S. non-proliferation amendment to the Foreign Assistance Act of 1961 passed in 1976, stated that U.S. foreign economic and military assistance would be suspended to any country found to be delivering, receiving, transferring, or acquiring

[3] For a discussion on Pakistan's proposal and the politics see Haider Nizamani, *The Roots of Rhetoric: Politics of Nuclear Weapons in India and Pakistan* (Westport, CT: Praeger Publishers), 2000.
[4] For a discussion on U.S. role in Indian nuclear test in 1974 see Paul Levanthal's statement on "CIRUS Reactor's Role in a U.S.-India Nuclear Agreement," at the Center for Non-proliferation Studies, Washington DC, December 19, 2005 available at http://www.nci.org/06nci/04/CIRUS%20Reactors%20Role%20in%20a%20US-India%20Nuclear.htm.
[5] Duane Bratt, *The Politics of CANDU Exports* (Toronto: Toronto University Press) 2006,148.

nuclear enrichment technology.[6] Pakistan was placed under the Symington sanctions in April 1979 after it was discovered that Pakistan was building an enrichment facility in Kahuta. Similarly, the Pressler sanction, a Pakistan-specific, non-proliferation legislation passed in 1985, was invoked in 1990, when there was evidence that Pakistan possessed a nuclear device, and U.S. President George H.W. Bush failed to certify to Congress that Pakistan did not possess a nuclear device.[7] The lessons learnt by Pakistan through the sanctioning and denial regime were negative, with the foremost being that the road to nuclearization goes through the black market. But even there, Pakistan's access to the black market was under the watchful eyes of the United States, and Pakistan did nothing that the U.S. government was not aware of at all times with respect to 'proliferation' and access to nuclear technology through the black market.

Pakistan's strategy to deal with the altered strategic dynamics in South Asia after the Indian nuclear test in 1974 consisted of the following: a) maintain nuclear ambiguity while seeking conventional military arms from the United States to modernize its military to counter the Indian conventional and nuclear threat; b) seek nuclear guarantees from major powers; c) stay out of the NPT while internationalizing the issues of both regional nuclear proliferation and disarmament by speaking out against the presence of nuclear weapons in the region; and d) acquire civilian nuclear technology from various international suppliers to firstly, meet its energy requirements and secondly, to develop its nuclear infrastructure.

South Asian Nuclear Experience and Positive Lessons

Since 1998, nuclear Pakistan and nuclear India have had several crises that have been managed by the active involvement of the United States and several other back channels. They are: Kargil 1999; the 2001-2002 Twin Peaks Crisis; and the 2008 Mumbai Attacks. The international community wants the two countries to learn from the U.S.-Soviet Cold War experience and understand that even when deterrence is credible, minimal or not, it is not fail-proof. Pakistani and Indian experiences during these crises and nuclear signaling thereafter suggest that there is absolutely no space for limited war under the nuclear umbrella. However, both countries believe

[6] The International Security Assistance and Arms Export Control Act of 1976 (popularly referred as the Symington Amendment); see Section 669, Chapter 3, Part III of the Foreign Assistance Act of 1961; Public Law 94-329.
[7] Subsec (e), Sec 902 of the International Security and Development Cooperation Act of 1985; Public Law 99-83

that their nuclear experiences and behavior towards each other is uniquely determined by their history and geography, which give rise to new sets of analytical variables that are different from those used to analyze the U.S.-Soviet dyad. And given that exceptionality, any 'learning' about nuclear Confidence Building Measures (CBMs), crisis management, nuclear risk reduction, arms race stability, or reducing nuclear arsenals to an appropriate size or even reaching eventual zero cannot be an 'external' process. It can neither be 'outsourced' nor 'imported'. It needs to be an internal process.

New Learning from Indo-Pak Bilateral Crises

In our 'Nuclear Learning in South Asia' paper, Debak Das and I propose several lessons that both India and Pakistan still need to learn from their bilateral crises.

For lessons from the bilateral crises, we propose the following:

1. No measures should be taken by either country to destabilize mutual nuclear deterrence.
2. Nuclear signaling early on in the conflict has the potential of gearing a crisis towards a rapid nuclear escalation.
3. Limited war under the nuclear umbrella is a lethal doctrine, and thus should be abandoned.
4. Bilateral mechanisms of crisis stability should be devised to reduce the reliance on third-party crisis management.
5. There should be a continuous process of conventional and nuclear trust and CBMs between the two countries.
6. There should be no ambiguity about nuclear force postures vis-à-vis each other.
7. The deterrence value of battlefield nuclear weapons is fragile and provocative to say the least.[8]

We further propose CBMs for future risk-reduction between India and Pakistan, as follows:

1. Adopt CBMs that stress early warning.
2. Establish a Bilateral Crisis Management Center.
3. Adopt CBMs on reducing the threat of cross-border nuclear sabotage.
4. Adopt a common nuclear-strategic lexicon to avoid miscommunication and misunderstanding.
5. Engage academia and experts in strategic debates for policy inputs.
6. Negotiate an agreement on Conflict Avoidance Measures (CAMs) to ensure steps to establish bilateral and multilateral preventive diplomacy.
7. Come together in a common forum like the Nuclear Security Summit to address common concerns related to but not restricted to nuclear and radioactive security.
8. Promote and establish a bilateral, if not multilateral, No First Use agreement.[9]

[8] Akhtar and Das, *Nuclear Learning in South Asia*, pp.38 (pdf)

Nuclear Stability at Low Numbers: The Uniqueness of the South Asian Challenge

India and Pakistan truly de-hyphenate on what shapes their nuclear behavior and how they have internalized the lessons learned, pre- and post- nuclearization. For India, there have been systemic and sub-systemic influences that have shaped its nuclear choices and behavior and continue to do so. For Pakistan it has mainly been sub-systemic influences that have shaped its nuclear choices and behavior and continue to do so. Since the sources of the influences that shape their nuclear behavior are different, each country would require a unique approach if the goal is to integrate them into the new nuclear order. And in order for that to happen, the international community needs to understand those influences, respect their differences, and work towards mitigating the circumstances that continually reinforce their desire to expand their nuclear weapons infrastructure.

If you were to ask India and Pakistan, they would say they are already at low numbers and there is nuclear stability, with the exception of a crisis here and there. That is, the 'South Asian Challenge' does not really appear to be a challenge to the two South Asian countries. You add China to the mix and it also maintains that its stockpile is not increasing beyond a minimal number that it has determined to be sufficient for credible deterrence. Therefore, the challenge lies somewhere else and not in South Asia. Why do India and Pakistan believe it is not their problem? That eventual zero or disarmament is not their responsibility to share or even their burden to bear? The answer is not that difficult.

Former U.S. Secretary of Defense Robert McNamara, in his 2009 *Foreign Policy* article 'Apocalypse Soon', wrote the following, which is still valid and hauntingly accurate today and will remain so for future, given the pace of nuclear modernization by the United States and Russia:

"What is shocking is that today, more than a decade after the end of the Cold War, the basic US nuclear policy is unchanged. Of the 8,000 active or operational nuclear warheads, 2,000 are on hair-trigger alert, ready to be launched on 15 minutes' warning…On any given day, as we go about our business, the president is prepared to make a decision within 20 minutes that could

[9] Ibid, pg. 40

launch one of the most devastating weapons in the world… To declare war requires an act of congress, but to launch a nuclear holocaust requires 20 minutes' deliberation by the president and his advisors."[10]

According to the *FAS Nuclear Notebook 2016,* the U.S. maintains a stockpile estimated at 4,670 warheads, of which 1,930 warheads are deployed, 1750 on ballistic missiles and 180 tactical bombs at European bases. The warheads that are retired but intact are around 2,340, making it a stockpile of 6,970 warheads in total.[11] For Russia, as discussed in the *FAS Nuclear Notebook 2016,* the estimated stockpile is at 4,500 active nuclear warheads and 2,800 retired warheads, making an inventory total of 7,300 warheads.[12] Therefore, to India and Pakistan, *it is clear where the discussion needs to begin.*

[10] Robert S. McNamara, "Apocalypse Soon," *Foreign Policy,* October 21, 2009 available at http://foreignpolicy.com/2009/10/21/apocalypse-soon/.
[11] Data at http://www.tandfonline.com/doi/full/10.1080/00963402.2016.1145901.
[12] Data at http://thebulletin.org/2016/may/russian-nuclear-forces-20169394.